

SUBJECT : MATHEMATICS
CHAPTER NUMBER: 04
CHAPTER NAME :DECIMAL FRACTIONS

CHANGING YOUR TOMORROW

Learning outcome

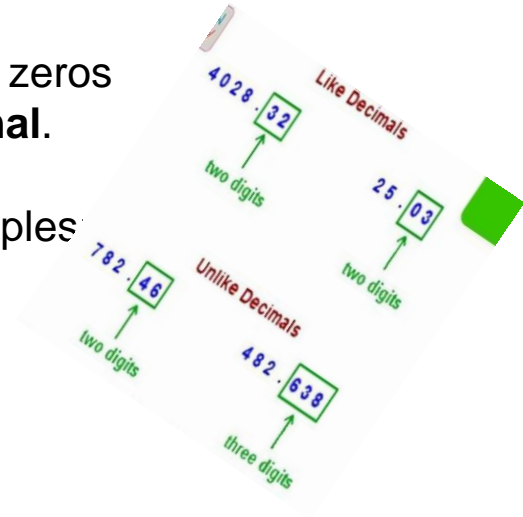
- Students will be able to
- Add and subtract decimal numbers.
- Solve word problems involving addition and subtraction of decimal numbers.



How unlike decimals can be converted into like decimals ?

We can **convert unlike decimals** into **like decimals** by adding zeros to the right of **decimal** point or by finding their equivalent **decimal**.

Note: **Unlike decimals** can also be equivalent **decimals**. Examples 0.3, 0.30, 0.3000 are **unlike** but equivalent **decimals**.



Video on Addition and Subtraction of Decimals

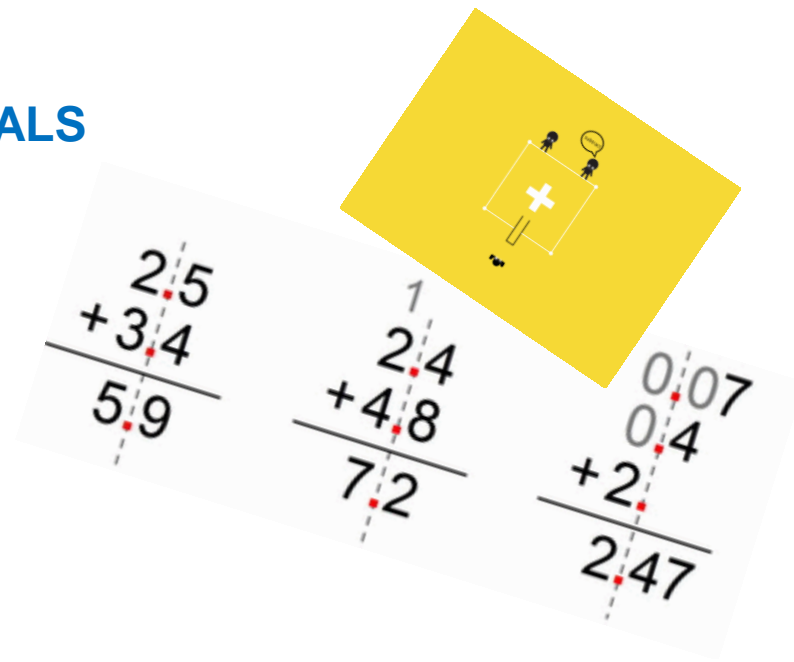
<https://www.youtube.com/watch?v=N2v8KD3jDB8> (3.00 min)

ADDITION AND SUBTRACTION OF DECIMALS

Decimal points of the given numbers are placed exactly one below another.

While adding or subtracting two decimal numbers, the number of digits after the decimal point should be equal.

In case they are not equal, the gaps must be filled with zeros after the last digit.



1. Add:

(viii) 6.08, 60.8, 0.608 and 0.0608

So we get

$$6.08 + 60.8 + 0.608 + 0.0608 = 67.5488$$

(ix) 29.03, 0.0003, 0.3 and 7.2

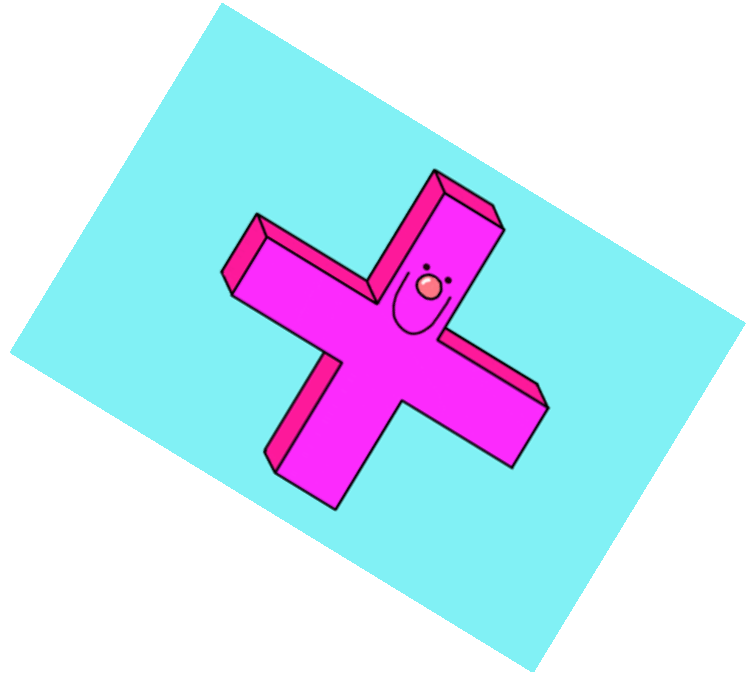
So we get

$$29.03 + 0.0003 + 0.3 + 7.2 = 36.5303$$

(x) 3.4, 2.025, 9.36 and 3.6221

So we get

$$3.4 + 2.025 + 9.36 + 3.6221 = 18.4071$$



2. Subtract the first number from the second:

(viii) 4.73, 8.5

It can be written as

$$8.5 - 4.73 = 3.77$$

(ix) 12.63, 36.2

It can be written as

$$36.2 - 12.63 = 23.57$$

(x) 0.845, 3.71

It can be written as

$$3.71 - 0.845 = 2.865$$



3. SIMPLIFY :

vi) $4000 - 30.51 - 753.101 - 69.43$

(vii) $0.1835 + 163.2005 - 25.9 - 100$

(viii) $38.00 - 30 + 200.200 - 0.230$

(ix) $555.555 + 55.555 - 5.55 - 0.555$

(vi) $4000 - 30.51 - 753.101 - 69.43$

It can be written as

$$= 4000 - (30.51 + 753.101 + 69.43)$$

On further calculation

$$= 4000 - 853.041$$

$$= 3146.959$$



vii) $0.1835 + 163.2005 - 25.9 - 100$

It can be written as

$$= (0.1835 + 163.2005) - (25.9 + 100)$$

On further calculation

$$= 163.2840 - 125.9$$

$$= 37.484$$

(viii) $38.00 - 30 + 200.200 - 0.230$

It can be written as

$$= (38.00 + 200.200) - (30 + 0.230)$$

On further calculation

$$= 238.200 - 30.230$$

$$= 207.970$$

$$= 207.97$$

(ix) $555.555 + 55.555 - 5.55 - 0.555$

It can be written as

$$= (555.555 + 55.555) - (5.55 + 0.555)$$

On further calculation

$$= 611.110 - 6.105$$

$$= 605.005$$

5. Take out the sum of 19.38 and 56.025, then subtract it from 200.111.

Solution:

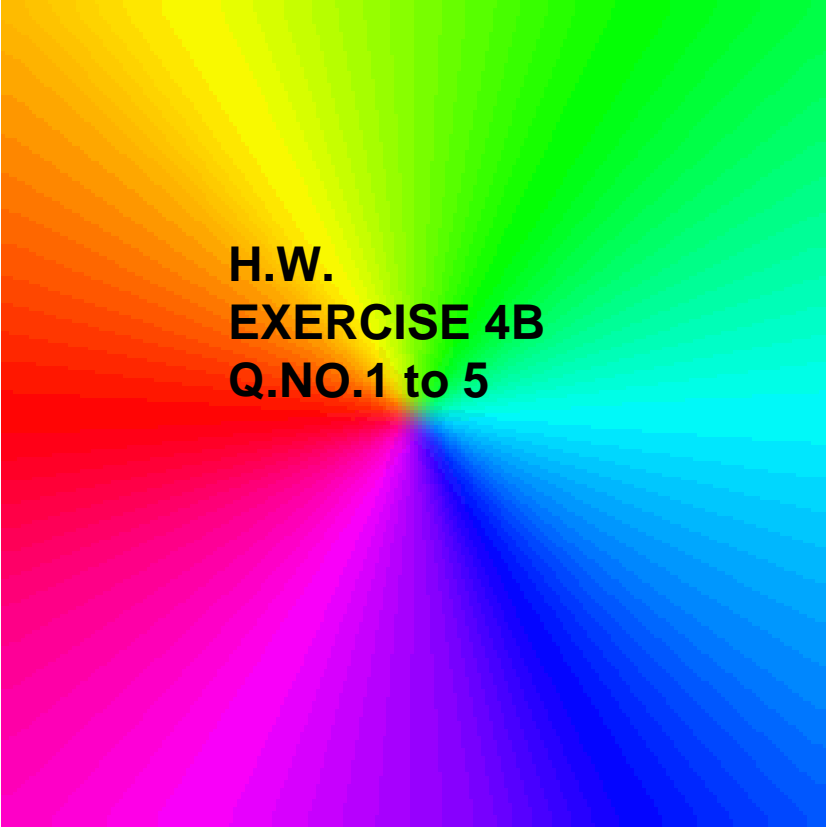
We know that the sum of 19.38 and 56.025 can be written as

$$19.38 + 56.025 = 75.405$$

We can write it as

Difference between 200.111 and 75.405

$$200.111 - 75.405 = 124.706$$



**H.W.
EXERCISE 4B
Q.NO.1 to 5**

AHA

Energy content of different foods are as follows:

Energy content of different foods are as follows:

Food	Energy content per kg
Wheat	3.2 J
Rice	5.3 J
Potatoes (Cooked)	3.7 J
Milk	3.0 J

Which food provides the least energy and which provides the maximum?

Express the least energy as a fraction of the maximum energy.

THANKING YOU
ODM EDUCATIONAL GROUP